Applicant: Chung et al. Attorney's Docket No.: 12144-009001

Serial No.: 09/976,240
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AMENDMENTS TO THE CLAIMS (THIS LISTING REPLACES ALL PRIOR LISTINGS):

1. (currently amended) A method comprising:

in a <u>wireless communication system having sectors including a first sector and a second sector, the first sector being in a first cell, the second sector being in the first cell or in another cell, cell having a first sector and at least one other sector of a cellular wireless communication system,</u>

determining a current state of transmissions in at least one of the other sectors of the cell or a sector in another cell; and

altering the signal-to-interference ratio of at least one user in the first sector, the at least one user in the first sector being in communication with the communication system only via the first sector, the signal-to-interference ratio being altered of the cell by temporarily reducing transmission power on a forward link in at least one of the other sectors of the cell or the sector in another cell, the second sector, the reducing of the transmission power being dynamically determined based on the determined a determination of a current state of transmissions to one or more users in the at least one other sector, each of the one or more users in the second sector being in communication with the communication system only via the second sector. -of the cell or the sector in another cell.

2. (previously presented) The method of claim 12 in which pattern is organized in a sequence of time slots and the pattern defines which of the sectors has transmissions turned on or off in each of the time slots.

in the

- 3. (cancelled)
- 4. (cancelled)

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5. (currently amended) The method of claim 1 in which the current state of transmissions includes a status of transmissions scheduled in neighboring sectors in the cell or in one or more other cells second sector.

- 6. (currently amended) The method of claim [[5]] 1 in which the current state of transmissions includes transmission rates of some neighbor sectors the second sector.
- 7. (currently amended) The method of claim 1 in which the current state of transmissions includes a next time slot usage for one or more sectors at second sector.
- 8. (currently amended) The method of claim 1 in which the current state of transmissions includes a forward link signal-to-interference ratio of users in one or more sectors the at least one other sector.
- 9. (previously presented) The method of claim 1 in which the current state of transmissions includes user location.
- 10. (currently amended) The method of claim 1 in which the current state of transmissions includes a fairness setting for one or more users.
- 11. (previously presented) The method of claim 1 in which the current state of transmissions includes an application type of one or more users or a quality of service level for one or more users.
- 12. (currently amended) The method of claim 1 in which temporarily reducing the transmissions comprises turning transmissions on and off in selected sectors according to a pattern.

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(currently amended) The method of claim 12 in which the pattern includes 13. turning off transmissions in the second sector other sectors more frequently to help users in the first sector having lower communication rates.

- (original) The method of claim 1 also including arranging a frequency reuse 14. factor of one or higher in the wireless system.
- (original) The method of claim 1 in which the wireless system comprises lxEV-15. DO.
 - 16. (currently amended) Apparatus comprising

wireless transmission facilities for more than one sector of a cell sectors including a first sector and a second sector of a wireless communication system, the first sector being in a first cell, the second sector being in the first cell or in another cell, and

control facilities connected to the wireless transmission facilities and configured to:

determine a current state of transmission for one or more of the sectors serviced by the wireless transmission facilities; and

alter the signal-to-interference ratio of at least one user in a the first sector, the at least one user in the first sector being in communication with the communication system only via the first sector, the signal-to-interference ratio being altered of the cell by temporarily reducing transmission power on a forward link in the second at least one other sector, of the cell or a sector in another cell, the reducing of the transmission power being dynamically determined based on the determined a determination of a current state of transmissions to one or more users in the second sector, each of the one or more users in the second sector being in communication with the communication system only via the second sector. in at least one other sector of the cell or the sector in another cell.

17. (original) The apparatus of claim 16 in which the control facilities comprise sector controllers for controlling the wireless transmission facilities for the respective sectors. Applicant: Chung et al. Attorney's Docket No.: 12144-009001

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18. (cancelled)

19. (currently amended) Apparatus comprising

a sector controller adapted to control transmissions in a <u>first</u> sector of a <u>first</u> cell of a wireless communication system, the transmissions in the first sector being to at least one user in the <u>first sector</u>, the at least one user communicating with the communication system only via the <u>first sector</u>,

the sector controller further adapted and to alter the signal-to-interference ratio of the at least one user in the first sector by communicating communicate with other sector controllers in the first cell or in one or more other cells a second cell to coordinate a temporary reduction of transmission power on a forward link in at least one a second sector, the second sector being in the first cell or in the second cell, of the sectors, wherein the reduction of the transmission power is dynamically determined based on a current transmission state of transmissions to one or more users in the second sector, each of the one or more users in the second sector being in communication with the communication system only via the second sector. at least another one of the sectors.

20-35. (cancelled)

36. (currently amended) The method of claim 1, further comprising: estimating a signal-to-interference-and-noise ratio based on information received from the <u>a</u> mobile station; and

determining an encoding and modulation scheme for the data packet based on the estimated signal-to-interference-and-noise ratio.

- 37. (previously presented) The method of claim 36 wherein each sector transmits a pilot signal and the received information comprises information indicating a strength of one or more of the pilot signals detected by the mobile station.
 - 38. (cancelled)